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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/737,381	12/14/2000	Jean-Francois Csomo	GA-5582	1869

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EXAMINER

BUGG, GEORGE A

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/737,381

Applicant(s)

CSOMO, JEAN-FRANCOIS

Examiner

George A Bugg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☒ Claim(s) 6-8 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2 and 3</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Information Disclosure Statement

1. Applicant filed an IDS with this Application, and subsequently filed an addition IDS on 01/25/2001. The references cited on each of the 1449 forms are identical. Therefore, the Examiner has considered all references cited by Applicant, however is only including a copy of the 1449 for the IDS filed with the Application.

Claim Objections

2. Applicant's claim language pertaining to claim 3 is somewhat confusing. The claim requires that combined signals be distributed among N receivers, however, Applicant's Specification, (page 4, lines 15-20) as well as Figure 1, show the combined signals being separated prior to distribution. Please clarify.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,091,717 to Honkasalo et al.

5. As for claim 1, Applicant claims the following: **“System for the terrestrial transmission of digital signals in accordance with the MPEG2-TS and DVB-T standard and carrying information for synchronization in accordance with the TS 101 191 standard comprising: N transmitters or transmission channels operating respectively at N different frequencies F1 to FN, each transmitter receiving a same digital signal to send in the form of packets in accordance with the MPEG2-TS standard, N receivers or receiving channels operating respectively at N frequencies F1 to FN, each receiver supplying a succession of packets in accordance with the MPEG2-TS standard, N error detection devices for detecting errors in the packets supplied by each receiver, N synchronization devices for synchronizing the packets supplied by each receiver, and a device for selecting one packet among the N available packets that does not contain an error or, failing that, a packet that corresponds to the lowest error rate.”** Attention is drawn to column 4, line 26 through column 5, line 3, as well as Figures 1 and 2, of the Honkasalo reference. As shown in Figure 1, each mobile station (MS) comprises a receiver and a transmitter. Furthermore, Figure 2 shows the base station (BS) with a receiver and transmitter as well, and the cited passage states that the system can contain multiple base stations, and is capable of packet data transmission of digital signals. Column 10, lines 35-40 state that multiple mobile stations may also be utilized. The fact that Honkasalo teaches the use of plural receivers and transmitters is in an

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inherent teaching of transmitters and receivers operating at N frequencies. Moreover, systems, which utilize multiple receivers and transmitters operating at different frequencies, are well known in the art. In addition, this passage of the Honkasalo reference also states that the system may employ a digital signal processor device, a microprocessor device, and various A-D and D-A converters, as well as other support circuits. While Honkasalo may not specifically teach synchronization devices, it is a fact that systems which deal with packet distribution in time based systems must have synchronization capabilities in order to properly transmit and receive data. Lastly, in column 6, lines 49-62, Honkasalo discloses that channels are selected based upon lowest bit rate error or frame rate error. While the Honkasalo reference does not specifically teach an MPEG2 transmission system, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of the MPEG2 standard into the system of Honkasalo for the purpose of increasing transmission times, as well as signal quality.

6. As for claims 2 and 3, transmitters and receivers are well known in the art to contain antennas. In the case of Honkasalo system, as previously stated, column 4, line 26 through column 5, line 3, as well as Figures 1 and 2, show that each mobile station (MS) comprises a receiver and a transmitter. Furthermore, Figure 2 shows the base station (BS) with a receiver and transmitter as well, and the cited passage states that the system can contain multiple base stations and column 10, lines 35-40 state that multiple mobile stations may also be utilized. Moreover, as can be seen in Figures 1 and 2, the mobile station does in fact shown an antenna, as is the case with most

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transmitters and receivers. Therefore, antennas at different locations receiving and transmitting data is inherently taught. As best understood by the Examiner, Honkasalo creates a combined signal from plural sources.

7. As for claims 4 and 5, while Honkasalo may not specifically teach the claimed limitations, however, time shifting in multiplexed systems is well known in the art, as well as synchronization for data realignment. Honkasalo teaches a time-multiplexed system (Abstract) and inherently synchronization is necessary. It is a fact that systems which deal with packet distribution in time based systems must have synchronization capabilities in order to properly transmit and receive data. In addition, buffer memory and reading and storing information at specific times are obvious embodiments, and would be necessary for proper receiving and transmitting of information. Moreover, Applicant's Specification defines said buffer as FIFO buffer which means first in first out, so the time shift information is not really relevant.

Allowable Subject Matter

8. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: As claimed in claims 6-8, the closest art fails to teach or suggest the use of megaframes, wherein a ninth bit D9 is set to 1 for the purpose of error detection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George A Bugg whose telephone number is (703) 305-2329. The examiner can normally be reached on Monday-Thursday 7:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

George A Bugg
Examiner
Art Unit 2613

GAB

February 5, 2004


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2300